

PATENT ABSTRACTS OF JAPAN

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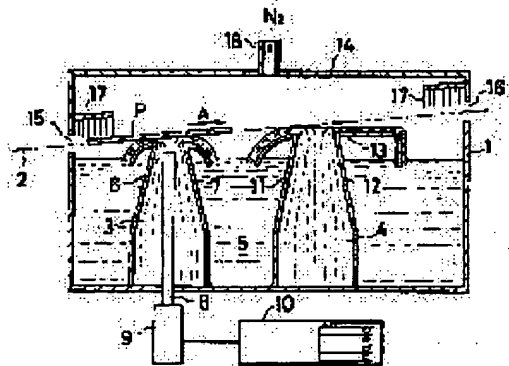
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(54) SOLDERING METHOD AND DEVICE OF PRINTED BOARD

(57)Abstract:

PROBLEM TO BE SOLVED: To provide the method and device capable of soldering in ultrasonic oscillation pertinent to a printed substrate meeting any requirements.

SOLUTION: A primary nozzle 3 jetting fierce waves is provided with a ultrasonic horn to be connected to a ultrasonic oscillator. A jet solder vessel 1 is provided with a cover 14 equipped with an inert gas feeding port 18 so that the inside of the cover 14 may be made inert atmospheric thereby enabling excellent soldering step causing no oxidation at all to be performed.



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2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] In the soldering technique which solders one by one with the secondary jet nozzle which carries out the jet of the primary jet nozzle which carries out the jet of the wave motion which is powerful while making it run a printed circuit board by the transport device, and the quiet wave motion While the fraction from which the printed circuit board of a primary jet nozzle and a secondary jet nozzle secedes is made into an inert atmosphere The soldering technique of the printed circuit board characterized by soldering to the wave motion which carries out a jet by giving a supersonic oscillation by the sonicator which doubles with the conditions of a printed circuit board with a primary jet nozzle, and can carry out adjustable [of the vibration frequency].

[Claim 2] In the soldering equipment with which the secondary jet nozzle which carries out the jet of the primary jet nozzle which carries out the jet of the powerful wave motion, and the quiet wave motion was installed While the inert gas feed hopper which makes an inert atmosphere the fraction from which the printed circuit board of a primary jet nozzle and a secondary jet nozzle secedes is installed and the ultrasonic horn is moreover installed in the interior of a primary jet nozzle This supersonic-oscillation horn is soldering equipment characterized by connecting with the ultrasonic wave oscillator with vibration frequency strange good.

[Claim 3] The aforementioned inert gas feed hopper is soldering equipment according to claim 2 characterized by installing the upper part of a jet solder tub in wrap covering.

[Claim 4] The aforementioned inert gas feed hopper is soldering equipment according to claim 2 characterized by a printed circuit board being a gas nozzle towards the fraction which secedes from melting solder.

[Translation done.]